AMENDMENTS TO THE CLAIMS

1. (Currently amended) An α-ray measuring apparatus comprising:

an α-ray detector including a plurality of semiconductor detectors;

an adder for adding output signals from said respective semiconductor detectors;

an anticoincidence counter for taking a logical product of a plurality of semiconductor detectors, wherein the anticoincidence counter delays a signal created from the logical product to create a gate signal;

a signal corresponding to the gate signal is suppressed from an addition signal obtained by adding outputs from the plurality of semiconductor detectors; and

a peak analyzer for analyzing an energy distribution of α-rays based on ~~the addition of the output signals of said semiconductor detectors~~ a signal obtained after suppression of the signal corresponding to the gate signal from the addition signal obtained by adding the outputs from the plurality of semiconductor detectors.

2. (Currently amended) An α-ray measuring apparatus comprising:

an α-ray detector including a plurality of semiconductor detectors arranged on a plane surface;

an adder for adding output signals from said respective semiconductor detectors to generate an addition output signal;

an anticoincidence counter for anticoincidently counting the output signals from said respective semiconductor detectors,

wherein the anticoincidence counter takes a logical product of a plurality of semiconductor detectors and delays a signal created from the logical product to create a gate signal;

a signal corresponding to the gate signal is suppressed from an addition signal obtained by adding outputs from the plurality of semiconductor detectors; and

a peak analyzer for analyzing an energy distribution of α-rays based on ~~the addition of the output signals of semiconductor detectors~~ a signal obtained after suppression of the signal corresponding to the gate signal from the addition signal obtained by adding the outputs from the plurality of semiconductor detectors which are not anticoincidently counted.

3. (Currently amended) An α-ray measuring apparatus comprising:

an α-ray detector including a plurality of semiconductor detectors arranged one above another;

an adder for adding output signals from said respective semiconductor detectors to generate an addition output signal;

an anticoincidence counter for anticoincidently counting the output signals of said respective semiconductor detectors,

wherein the anticoincidence counter takes a logical product of a plurality of semiconductor detectors and delays a signal created from the logical product to create a gate signal;

a signal corresponding to the gate signal is suppressed from an addition signal obtained by adding outputs from the plurality of semiconductor detectors; and

a peak analyzer for analyzing an energy distribution of α-rays based on ~~the addition of the output signals of said respective semiconductor detectors~~ a signal obtained after suppression of the signal corresponding to the gate signal from the addition signal obtained by adding the outputs of said respective semiconductor detectors which are not anticoincidently counted.

4. (Currently amended) An α-ray measuring apparatus comprising:

an α-ray detector including a plurality of semiconductor detectors arranged on plane surfaces placed one above another;

an adder associated with each plane surface for adding output signals from said respective semiconductor detectors on said associated plane surface to generate an addition output signal;

an anticoincidence counter for anticoincidently counting the addition output signals of said respective sensors on said respective plane surfaces,

wherein the anticoincidence counter takes a logical product of a plurality of semiconductor detectors and delays a signal created from the logical product to create a gate signal;

a signal corresponding to the gate signal is suppressed from an addition signal obtained by adding outputs from the plurality of semiconductor detectors; and

a peak analyzer for analyzing an energy distribution of α-rays based on ~~the addition of the output signals of said respective semiconductor detectors~~ a signal obtained after suppression of the signal corresponding to the gate signal from the addition signal obtained by adding the outputs of said respective semiconductor detectors on said respective plane surfaces which are not anticoincidently counted.

5. (Original) An α-ray measuring apparatus according to claim 1, wherein: said anticoincidence counter anticoincidently counts between an output signal of at least one of said semiconductor detectors and output signals of the remainder of said semiconductor detectors.

6. (Original) An α-ray measuring apparatus according to claim 1, further comprising a data processor for specifying an energy range to be evaluated, and for displaying the result of analysis.

7. (Currently amended) An α-ray measuring method comprising the steps of:

detecting α-rays using a plurality of semiconductor detectors;

taking a logical product of a plurality of said semiconductor detectors using an anticoincidence counter;

delaying a signal created from the logical product using said anticoincidence counter to create a gate signal;

suppressing a signal corresponding to the gate signal from a signal obtained by adding output signals from said respective semiconductor detectors; and

analyzing an energy distribution of the α-rays based on an addition of the output signals from said semiconductor detectors.

8. (Currently amended) An α-ray measuring method comprising the steps of:

detecting α-rays using a plurality of semiconductor detectors arranged on a plane surface;

taking a logical product of a plurality of said semiconductor detectors using an anticoincidence counter;

delaying a signal created from the logical product using said anticoincidence counter to create a gate signal;

suppressing a signal corresponding to the gate signal from a signal obtained by adding output signals from said respective semiconductor detectors;

anticoincidently counting the output signals from said respective semiconductor detectors; and

analyzing an energy distribution of the α-rays based on an addition of the output signals from said semiconductor detectors which are not anticoincidently countered.

9. (Currently amended) An α-ray measuring method comprising the steps of:

detecting α-rays using a plurality of semiconductor detectors arranged one above another;

taking a logical product of a plurality of said semiconductor detectors using an anticoincidence counter;

delaying a signal created from the logical product using said anticoincidence counter to create a gate signal;

suppressing a signal corresponding to the gate signal from a signal obtained by adding output signals from said respective semiconductor detectors;

anticoincidently counting the output signals of said respective semiconductor detectors; and

analyzing an energy distribution of the α-rays based on an addition of the output signals from said semiconductor detectors which are not anticoincidently countered.

10. (Currently amended) An α-ray measuring method comprising the steps of:

detecting α-rays using a plurality of semiconductor detectors arranged on plane surfaces placed one above another;

taking a logical product of a plurality of said semiconductor detectors using an anticoincidence counter;

delaying a signal created from the logical product using said anticoincidence counter to create a gate signal;

suppressing a signal corresponding to the gate signal from a signal obtained by adding output signals from said respective semiconductor detectors on each of said plane surfaces;

anticoincidently counting the output signals from said respective semiconductor detectors on said respective plane surfaces; and

analyzing an energy distribution of the α-rays based on an addition of the output signals from said semiconductor detectors on each of said plane surface which are not anticoincidently countered.